

NEW ENGLAND NOTE

NEW BARNSTABLE COUNTY RECORDS

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During the field season in 1994, I documented two new records for Barnstable County along with one significant rediscovery:

***Bidens laevis* (L.) BSP. (Asteraceae)**

Many hundreds of plants of *Bidens laevis* (L.) BSP. were found in the upper Mashpee River within the freshwater tidal zone just south of Route 28 in Mashpee, Massachusetts. Large or showy bur-marigold is a perennial characterized by 8–10 golden yellow ray flowers arranged around a flat disk, many measuring up to 3 cm long. The sharply serrate, sessile leaves are lanceolate and reach up to 15 cm. in length. In fruit the mature disk is 2–3 cm. broad and often nods; achenes are two to four-awned. Typical habitat for *B. laevis* is sluggish streams, either fresh or brackish, along the coastal plain of the eastern seaboard from Florida north to southern New Hampshire (Fernald, 1950; Gleason and Cronquist, 1991). Records have been documented for Plymouth County to the north and Bristol County to the west (Seymour, 1982). A check of the G. M. Gray Herbarium (SPWH) in Woods Hole and a literature search revealed no previous records documented for Barnstable County (Seymour, 1982; Svenson and Pyle, 1979).

***Rumex pallidus* Bigel. (Polygonaceae)**

Six plants were discovered on August 26, 1994, in a barrier beach 'washover' area just east of Crosby Landing Beach in East Brewster, Massachusetts. Characterized by glaucous, narrowly lanceolate leaves, prostrate or depressed habit and whitish fruit arranged within a dense, spreading panicle, this taxon is typically found in the upper beach zone above normal high tide but within the stormtide washover area where beach profiles can change dramatically from season to season. Associated taxa include *Glaux maritima* L., *Lathyrus maritimus* (L.) Bigelow, *Xanthium strumarium* L., *Solidago sempervirens* L. and *Mertensia maritima* (L.) S. F. Gray (see next notation).

Pale or seabeach dock ranges from Newfoundland south to Nantucket (Fernald, 1950; Seymour, 1982); historically it was found as far south as Long Island (Seymour, 1982). Its present status in Massachusetts is classified as Threatened by the Massachusetts Natural Heritage and Endangered Species Program. This represents the first record ever for Barnstable County (P. Somers, MNHESP pers. comm.; Svenson and Pyle, 1979). A specimen was placed in the herbarium collection at the Garden in the Woods in Framingham; 35 mm. slides and an Element Occurrence form were filed with MNHESP.

***Mertensia maritima*** (L.) S.F. Gray (Boraginaceae)

Due to its sporadic appearances and disappearances, seabeach lungwort or oysterplant has had a long history as a "phantom" or "fugitive" plant in Massachusetts (Bicknell, 1915; Svenson and Pyle, 1979). Cape Cod and Nantucket mark the southern limit of its range, which stretches north from Massachusetts to all the coastal counties of Maine (where it is fairly common) and to James Bay and Greenland (Fernald, 1950). It is classified as Endangered by the Massachusetts Natural Heritage and Endangered Species program.

From 1983 to 1988, Dr. Peter Dunwiddie of Nantucket noted the plant on the Coatue peninsula and Whale Island, a sandspit currently connected to Tuckernuck Island. These plants disappeared and no sign of the species was again noted until 1994, when Dr. Dunwiddie found 7 plants scattered along the eastern shore of the island (Dunwiddie, 1994, pers. comm.).

In Barnstable County, the plant was noted in the early 1970's in West Brewster by Don Schall but disappeared in 1974 (Schall, pers. comm.) and was not seen again on the Cape until 1992 when Kyle Jones of the Cape Cod National Seashore found populations in three lower Cape localities: 21 non-flowering plants on Jeremey Point in Wellfleet, one plant at Marconi Beach, and 104 non-flowering and three flowering plants at Race Point in Provincetown (Jones, pers. comm.; MNHESP data). It was seen again in 1993 and 1994, but by then all three populations were noted as being in 'severe decline' (Jones, pers. comm.).

The East Brewster population of twelve plants contained ten flowering and fruiting "rosettes"; two other non-flowering plants were depauperate and stressed due to their location in closer

proximity to a heavily used bathing beach. The plant is quite distinctive, with sea-green, glaucous spatulate foliage which actually tastes of raw shellfish. The flowering branchlets radiate out from the central basal rosette in a spider-like configuration. As in most members of Boraginaceae, the small bluish-pink flowers are campanulate with fruits forming smooth, lustrous nutlets. The successful germination of their seeds amidst the "flotsam" of storm wrack detritus seems integral to the plant's habit of mysterious appearance and disappearance along the southern limit of its range. Vegetative reproduction from fragments may also occur but has not been documented (Dunwiddie, pers. comm.).

A follow up visit to the dramatically-changed winter beach in December 1994 revealed only one rosette partially buried in the overwash, all others having vanished out to sea or been buried deep beneath the newly deposited sand. By the late summer of 1995, the colony had diminished to five rosettes, with many desiccated flowering branches showing the stress of an unusually warm and dry growing season.

#### LITERATURE CITED

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